New River (Lower)
2008

The headwaters of the New River are near Boone, North Carolina. From the confluence of the North and South Forks of the New River near Mouth of Wilson, Virginia, the river meanders northward through Virginia for about 160 miles before reaching the West Virginia state line near Glen Lyn, Virginia. This river offers a variety of fishing opportunities, trophy fishing potential, and a variety of scenery in those miles. Whether you are a dedicated angler or an occasional one who appreciates getting away on a river, the New River offers the potential to satisfy your recreational needs. The 62.5 miles of river downstream from Claytor Lake offer some of the best river fishing in Virginia.

The New River hosts a variety of fish species that are favorites of many float anglers. Smallmouth, spotted, and largemouth bass, rock bass, redbreast sunfish, and bluegill were all introduced many years ago to the New River to provide fishing opportunities. All these fish species spawn in the river each year. Muskellunge are a more recent introduction whose numbers are partially supported by annual stocking. Channel and flathead catfish are both native to the New River.

Boat Access and Float Information

A basic New River float guide is available on our Department website at: http://www.dgif.virginia.gov/fishing/waterbodies/display.asp?id=163&section=maps. *The New River Guide* by Bruce Ingram, a more thorough float and fishing guidebook, is available from local bookstores. Back Country Ski and Sports in Blacksburg sells New River maps produced by River Maps Limited of Radford in the early 1980's (phone: (540) 552-6400).

Smallmouth Bass

Smallmouth bass are the most abundant bass species in the New River. During the 2002 New River angler survey, 83 percent of the anglers downstream from Claytor Lake fished for smallmouth bass and 59 percent of the total estimated catch was smallmouth bass. The New River is the top Virginia river for smallmouth bass, typically running first in terms of trophy fish. The current state record smallmouth bass (8 pounds, 1 ounce), caught by Donald Eaton in March 2003, came from the New River downstream from Claytor Lake. The top months to catch trophy smallmouth bass from the New River are July through September, but a good number of trophy "smallies" are also caught in April, May, and June. The majority of trophy smallmouth bass turned in for Department angler recognition certificates are from the counties downstream from Claytor Lake.

Anglers do well year-round for smallmouth bass with any bait that mimics crayfish, which are their preferred prey. Techniques that produce trophy smallmouth bass include fishing nightcrawlers, soft plastic baits, and top water lures in the summer months. Buzz baits worked around downed trees or weedbeds (particularly water willows) often produce strikes from lunker smallmouth bass. The best areas to fish for smallmouth bass in spring, summer, and fall are the Radford to McCoy Falls section of Montgomery County and the Pembroke to Pearisburg section of Giles County. In winter months, look for big smallies in deeper water areas of these sections. All sections of the river have difficult rapids to navigate, so a little research ahead of time is necessary to ensure your safety on the river.

Department fisheries biologists began smallmouth bass studies in the New River downstream from Claytor Lake in 1996. In 2006, fisheries biologist John Copeland wrote a case history of smallmouth bass management. This scientific journal article goes into more detail about the history of smallmouth bass management in this premier Virginia river (available at http://24.73.102.130/resource/dynamic/private/PDF/Copeland-180-187.pdf). Based on data collected during intensive sampling since 1996, we now know that smallmouth bass spawning success is controlled more by July river flows than any other factor. During years with average flows in July, young smallmouth bass survive better, resulting in good smallmouth bass fishing over a number of years. The best recent New River smallmouth bass spawns downstream from Claytor Lake were in 1996 and 1998, 2004 and 2005, and 2007. The 2004 year-class is the best spawn documented since intensive sampling began (Figure 1).

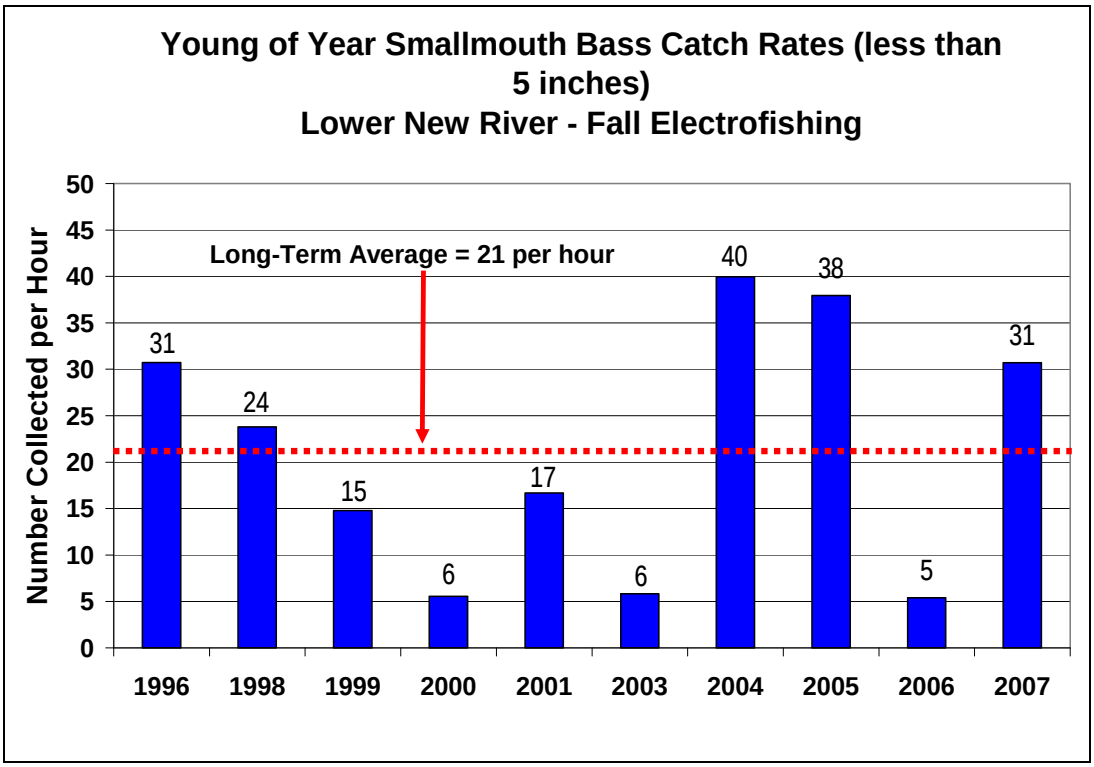

Figure 1: Electrofishing catch rates for young-of-year smallmouth bass in the Lower New River during fall collections from 1996 to 2007.

The huge spawns of 2004 and 2005 were reflected in electrofishing samples in fall 2007, with 80% of the adult smallmouth bass catch (over 7 inches long) consisting of bass between 7 and 14 inches. About 19% of the adult smallmouth bass collected in fall 2007 electrofishing on the New River were in the 14 to 20 inch range, so anglers will find good numbers of smallmouth bass within the current restricted slot limit. Trophy smallmouth bass fishing will be good in coming years, with smallmouth bass from the above average spawns of 1996 and 1997 now over 20 inches long.

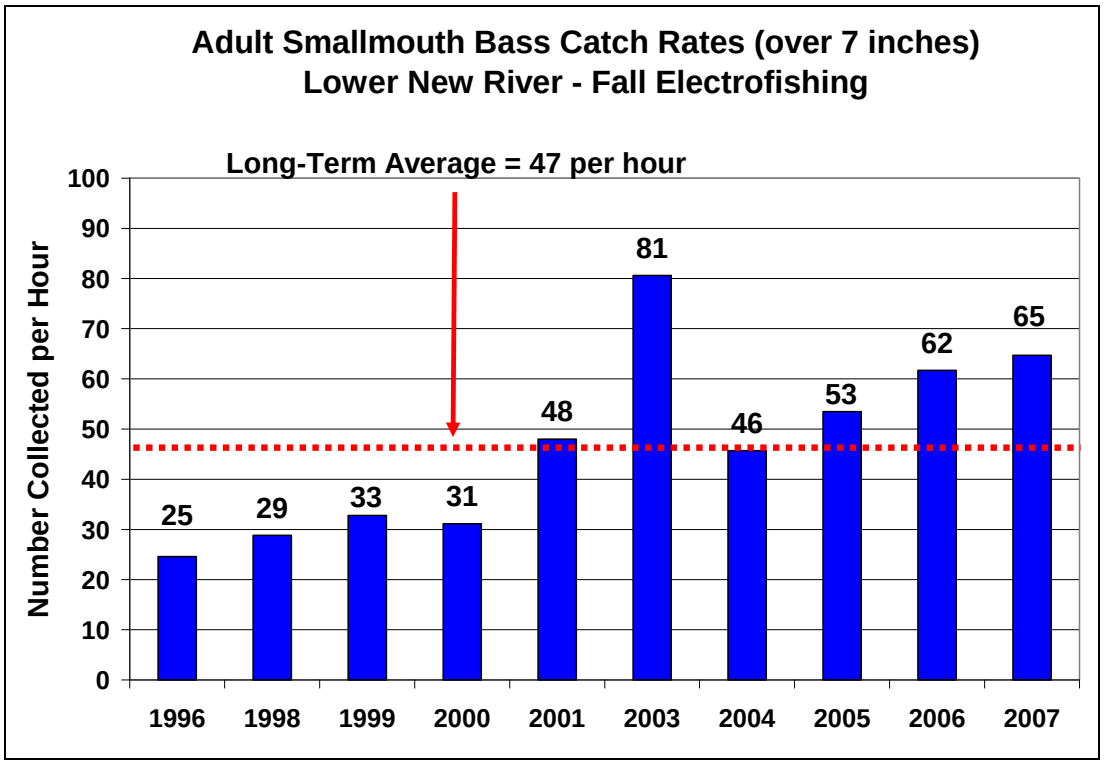

Figure 2: Electrofishing catch rates for adult smallmouth bass in the Lower New River during fall collections from 1996 to 2007.

Catch rates for adult smallmouth bass peaked in 2003, due to a greater number of adult smallmouth bass in the river from the good spawns in 1996 and 1998. Catch rates declined in 2004, due the lack of good spawns between 1999 and 2003 (Figure 2). Adult smallmouth bass catch rates are currently above the long-term average due to the record spawns in 2004 and 2005. What does this mean for you? New River smallmouth bass fishing is better than it has been in the past 10 years, so get out there and catch some!

From Claytor Dam to the West Virginia state line, all three black bass species are protected by a 14 to 20 inch slot limit. The daily creel limit is 5 bass, with only one allowed over 20 inches. This limit, which allows harvest of bass up to 14 inches, restricts taking bass between 14 and 20 inches. Department fisheries biologists enacted this size limit in January 2003 to improve smallmouth bass size ranges in the river. During the angler survey on the New River in 2002, we learned that harvest of smallmouth bass from the New River downstream from Claytor Lake was concentrated on smallmouth bass over 14 inches. Of the smallmouth bass harvested by anglers, 37 percent were over

14 inches. Anglers who comply with the new bass size limit will benefit from the release of bass 14 to 20 inches long in terms of improved catches of trophy bass in the future.

Growth of smallmouth bass in the New River below Claytor Lake is average when compared to other rivers in Virginia. Smallmouth bass in the New River reach 11 inches in 4.5 years, 14 inches in 6.5 years, and 17 inches in 8.5 years. It takes an average of 10 years for them to reach 20 inches. The maximum age for smallmouth bass in the New River is 15 years, when they will likely be 24 to 25 inches long.

Smallmouth Bass Population Sizes

Virginia fisheries biologists recently demonstrated that population estimation methods used in small streams can also be used to estimate populations of smallmouth bass in large rivers. In 2005, biologists sampled the New River with this technique, which requires electrofishing boats working side-by-side collecting fish in a section of river (Figure 3). Multiple passes are made within a section until the number of smallmouth bass decreases enough in successive runs to allow statistical calculation of the population size.

Figure 3: Electrofishing boats collecting smallmouth bass for population estimates in the New River during September 2005.

Sites upstream from Claytor Lake were sampled in May 2005 because water flows are low in the fall. Sites downstream from Claytor Lake were sampled in September 2005. The results indicate that the New River's potential to produce smallmouth bass varies considerably from its headwaters in North Carolina (near Mouth of Wilson) to Rich Creek, near the West Virginia state line. Some of this variation is due to increasing fish production as this river transitions from a small river upstream from Claytor Lake to a large river downstream from Claytor Lake. The high smallmouth bass population estimate at Whitethorne (downstream from Claytor Lake) is most likely the result of lower than normal temperatures discharged from the deep water outlet on

Claytor Dam, which provides favorable temperature conditions for bass. Flathead and channel catfish populations in the New River in Montgomery County are lower than they are upstream from Claytor Lake and downstream in Giles County, where water temperatures recover to more normal levels. These catfish species prefer warmer water temperatures than smallmouth bass, so their populations decline in the river immediately downstream from the dam. As a result, smallmouth bass are the primary predator in the Montgomery County section of river. Larger smallmouth bass are available to anglers who fish downstream from Claytor Dam and the size ranges available vary in the 50 miles between the dam and Rich Creek (Figure 4).

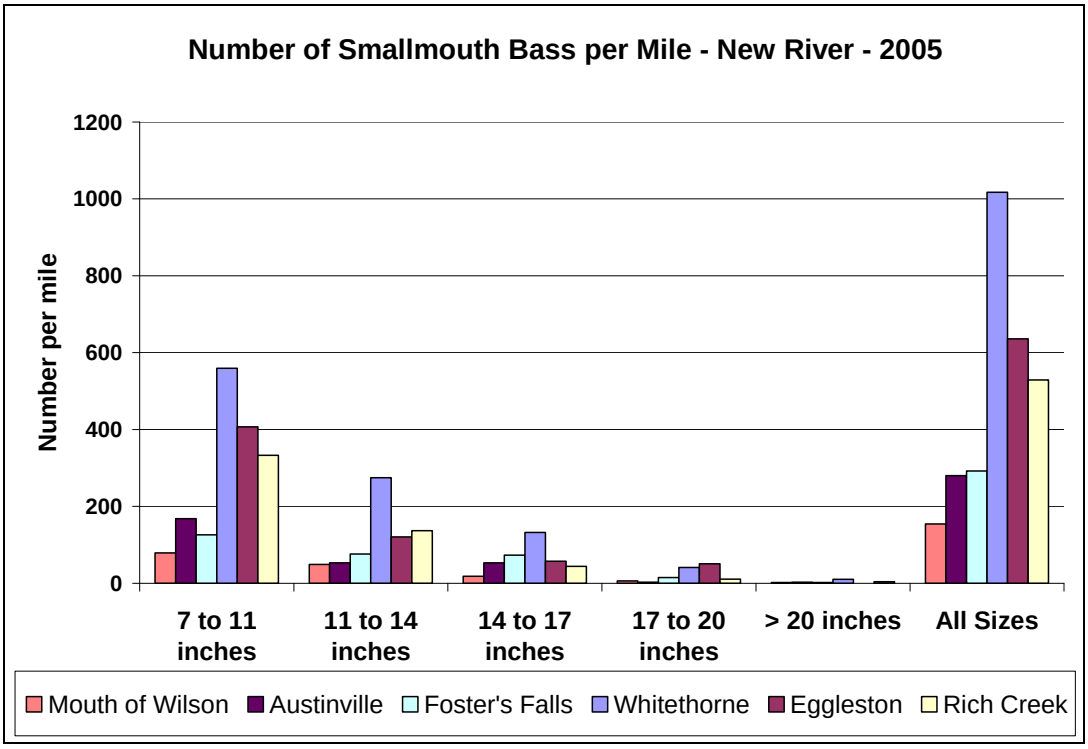

Figure 4: Estimated number of adult smallmouth bass in the Lower New River based on New River sampling in spring and fall 2005.

Panfish

New River panfish include redbreast sunfish, bluegill, and rock bass. Rock bass are found in the highest numbers, followed by redbreast sunfish, and then bluegill. Rock bass were the second most caught and the most harvested species during the 2002 New River angler survey. In that survey, rock bass accounted for 36 percent of the total fish catch and 69 percent of the total harvest downstream from Claytor Lake. Adult rock bass catches in fall electrofishing declined between 1999 and 2004, but rebounded to record levels by 2007. Decreased rock bass catches in 2004 were likely the result of poor spawns in the 2000 to 2003 period. Since the trend in this population is similar to the trend in the smallmouth bass population, we think that rock bass populations are affected by the magnitude of river flows (like smallmouth bass), although the month when river flows affect rock bass spawning is likely to be different.

Rock bass sizes vary between areas of the river. Good locations for nice-sized rock bass include Radford and Whitethorne in Montgomery County. Many of the major tributaries of the New River provide an opportunity to catch numerous sunfish in solitude. Some of the streams to check out include Big Walker and Wolf Creeks in Giles County, and the Little River in Floyd and Montgomery Counties. Since these streams are on private land, anglers should ask streamside landowners for permission to fish them.

Redbreast sunfish catches in fall electrofishing declined more quickly than rock bass catches between 1999 and 2004. The decline in redbreast sunfish numbers was more dramatic due to the fact that they live fewer years than either rock bass or smallmouth bass. Therefore, a decrease in their spawning success is noticed more quickly in catches of adult redbreast sunfish. Given that the trend in this population is very similar to the trends in the rock bass and smallmouth bass populations, it is reasonable to conclude that river flows affect the spawning success of these fish too. Poor spawns in the 2000 to 2003 period resulted in few adult redbreast sunfish in the population in fall 2004. Since 2004, redbreast sunfish numbers have rebounded to record levels.

Muskellunge

Muskellunge (often called musky) anglers are a dedicated lot, given that these fish are often called "the fish of ten thousand casts". In fact, only 1 percent of anglers during the 2002 New River angler survey identified themselves as musky anglers. The New River is the primary trophy musky river in Virginia. Since 1990, 45% of the trophy musky entered in the Department's angler recognition program were caught in the New River. The state record musky (a 45-pound, 8 ounce giant), caught by Shannon Hill in June 2007, was a New River fish. In the river downstream from Claytor Lake, musky are stocked from Claytor Dam to the West Virginia state line.

From 1999 to 2003, with funding from the Sport Fish Restoration Fund (through the Department of Game and Inland Fisheries), a graduate student at Virginia Tech intensively studied musky in the New River. His study indicates that one of the areas with the largest population of musky is the section between Pepper's Ferry Bridge and McCoy Falls, in Montgomery County. Most of the musky in this section live in the pool near the Whitethorne boat ramp, upstream of the mid-channel islands near the ramp, and downstream from the ramp near an area called Belspring. During the summer, musky hold near the edges of weed beds (even small ones). They sometimes hole up in riffle areas and near streams flowing into the river. They are usually found in less than 10 feet of water both in summer and winter.

The Virginia Tech musky study provided us with detailed information on musky diets in the New River below Claytor Lake. During that study, the Virginia Tech student examined 184 musky ranging in size from 14 to 50 inches in length. The musky examined that had food items in their stomachs primarily consumed suckers, minnows, sunfish (including redbreast sunfish and bluegill), and rock bass. These four items made up approximately 80 percent of the total food items consumed by these predators. Musky diets changed as they grew. Musky less than 28 inches long primarily fed on minnows, then switched to feeding mostly on sunfish when they were 28 to 35 inches long, and

when they were over 35 inches, they fed primarily on suckers. The study did not find any significant impact to the smallmouth bass population from the musky stocking. Since big musky prefer to eat suckers or sunfish, it is no surprise that musky are often caught on live chubs, suckers, and carp as well as bucktail spinners, large plugs, and top water lures.

Catfish

While all sections of the New River have populations of flathead and channel catfish, recent electrofishing population estimates at Whitethorne, Eggleston, and Rich Creek suggest anglers will find more catfish in Giles than in Montgomery County. In Montgomery County, look for catfish below Claytor Dam, the mouth of the Little River (near the Claytor Dam boat ramp), and below Pepper's Ferry Bridge (Route 114). In Giles County, the Narrows, Pearisburg, and Eggleston sections of the river are likely catfish areas. Most of the catfish harvested downstream from Claytor Lake during the 2002 New River angler survey were from the Giles County section of the river, but catfish catches were lower in the river downstream from Claytor Lake than they were upstream from Claytor Lake. Flathead catfish population estimates downstream from Claytor Lake are 50 percent of the estimates upstream from Claytor Lake. Recent temperature studies below Claytor Dam suggest that these population differences may be the result of the coolwater discharge from the dam, which creates unfavorable conditions for catfish populations until the river reaches normal temperatures in Giles County.

Fish Consumption Advisory in Montgomery, Giles, and Pulaski Counties and Radford City

The New River from Claytor Dam downstream to the West Virginia state line has a consumption advisory on carp, channel catfish, and flathead catfish. The Virginia Department of Health recommends anglers limit themselves to no more than 2 meals per month of channel catfish and flathead catfish and that no carp be eaten from this section of river. PCBs are a group of man-made industrial chemicals that exist as a mixture and may contain up to 209 individual compounds. Prior to 1977, PCBs were widely used as coolants and lubricants in transformers, capacitors and other electrical equipment. Long-term consumption of fish contaminated with high levels of PCBs may increase the risk of cancer. The Virginia Department of Health recommends the following preparation precautions to reduce any potential harmful effects from PCBs:

- Eat the smaller, younger fish (within the legal limits). They are less likely to contain harmful levels of PCBs than larger, older fish.
- Remove the skin, fat (from the belly and top of the fish) and internal organs where PCBs are most likely to accumulate before cooking the fish.
- Bake, broil or grill on an open rack to allow fats to drain away from the meat.
- Discard the fats that cook out of the fish.
- Avoid or reduce the amount of fish drippings or broth that are used to flavor the meal.
- Eat less deep fried fish, since frying seals PCBs into the fatty tissue.

More information on this fish consumption advisory is available at: http://www.vdh.virginia.gov/Epidemiology/dee/PublicHealthToxicology/Advisories/NewRiver.htm

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